STS-3 LAUNCH - ABC GOOD MORNING AMERICA COVERAGE (3-22-1982)

https://www.youtube.com/watch?v=AqUW3yum5ds (https://www.youtube.com/watch?v=AqUW3yum5ds)

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From Monday, March 22nd, 1982 ABC NEWS G.M.A Coverage of the launch of STS-3, the 3rd Space Shuttle Launch. Start with a bit of Today show coverage.

STS-3 CREW:
Commander: Jack R. Lousma
Pilot: C. Gordon Fullerton

- Launched at 11:00:00 A.M E.T

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[Music] six five four we've gone for main engine start we have the engine started shuttle and the shuttle has cleared the tower [Music] good morning this is today it's a monday march 22nd launch day launch day for the third launch of the space shuttle columbia you're looking on a live picture from cape canaveral florida launch pad 39 colonel jack robert lausma colonel c gordon fullerton not yet in the capsule but they will be and good morning hello i'm brian gumbel welcome to today the top news story of course at this hour is the scheduled launch of the space shuttle columbia that launch has now been delayed one hour due to a heating problem we'll be getting details from chris wallace and our science correspondent robert brazell they're at the cave shortly but first let me say good morning to robin young who is substituting for jane pauley this week good morning and welcome boy if that picture doesn't wake you up i don't know what will uh incidentally yesterday a fellow named fullerton announced that he would be leaving town at 10 o'clock this morning made it sound like he was going around the block actually he's going around the world about 115 times and chris will be talking to fullerton and last month in just about half an hour and also i'm going to be talking with basketball hoopster and her name you played with her yes nancy lieberman yes she's a good one too also gene shall and this are taking us behind the scenes inside the world of high fashion models and willard has his launch day weather lots more to come but first let us begin with the news and we'll go down to the cape good morning chris wallace brian good morning from the kennedy space center cape canaveral florida where a problem with a heater early this morning has delayed the launch of the third space shuttle mission for one hour we are now standing at two at t minus two hours and five minutes and holding a scheduled hole that has been extended for an hour and is expected to end about 8 35 this morning

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expected to end about 8 35 this morning again we're looking at a launch at 11 am the countdown had been proceeding without a hitch when a heater on the ground started acting up shortly before 3 30 this morning it took an hour to fix and so astronauts lousma and fullerton will go up at 11 a.m eastern time instead of 10 if everything continues to go well bob zell is standing by now with a report on just exactly what did go wrong this morning bob good morning chris the problem was really a minor one uh the heater was one that heats up nitrogen gas which is used to purge or clean out the main engines workmen were easily able to fix the heater after it broke down but it delayed the entire sequence of events that must be carried out before the launch can proceed so the launch director george page decided to move the entire thing back one hour other than that there are no difficulties right now as you mentioned we're in a planned hold out on the launch pad they're still loading up liquid hydrogen and oxygen into the main fuel tank that'll be finished in a few minutes and the crew that's called the closeout crew the men that do the final operations before the launch will be moving out to the launch pad in a few minutes the weather right now which could be a factor in the launch is is overcast but the forecasters are calling for all this to burn off long before the launch time so right now it looks real good chris baba you may notice incidentally and maybe we can flash up another picture of the space shuttle that it looks different this time than it has in the past and the reason is that they haven't painted that big external fuel tank there you can see it looks brown instead of white the reason is that that's the natural color when they put on the spray-on foam insulation they simply didn't put paint on on top of that the reason was to saving savings of 600 pounds in weight savings of 1500 in cost uh it may look brown or rust color to you but according to local chamber of commerce types they're saying it looks tangerine to them the problem with the heater as we've said has delayed everything about one hour the astronauts jack lousman and gordon fullerton were awakened at 5 10 this morning instead of

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this morning instead of six ten uh we're rather awakened at six ten instead of five ten they have had breakfast lousma steak and eggs the traditional astronaut breakfast fullerton something a little different breakfast cereal we don't know which brand the fueling of the external tank was supposed to be completed at 6 30 a.m that will now slip till 7 30 a.m and the huge crowds that come to the cape to watch this launch and every lunch will now have at least one extra hour to try to find some parking place somewhere so they can see the mike siemens reports on the event so far last night and early this morning to hopefully watch the third launch of the space shuttle columbia but some snapped up prime viewing areas as early as saturday perhaps no crowd will ever match the excitement and the enthusiasm of the one that watched the first launch almost a year ago but there are many first-timers here who can't wait to see the blast off i'll be amazed because i always people i think take it for granted be here to see one take off it's exciting it's exciting it's gonna be there you get to feel the vibration as many as one million people are in campgrounds hotels motels and along the highways and beaches waiting for the launch the crowd is perhaps larger than expected because it's believed many tourists and college students on spring vacation extended their stay in florida to see columbia go up for the third time here at the space center the shuttle's crew jack lousman and gordon fullerton came down for breakfast about 15 minutes ago they asked and fullerton should enter the orbiter in less than our own astronaut who's going to be helping us this morning vance brand and good morning vance vance was in space in 1975 and apollo sawyers he'll be going back sometime this november and the fifth space shuttle mission vance let me ask you what does this kind of a delay do to the astronauts is it disturbing to them in any way no i don't i don't believe this would be disturbing at all if it had been the case where they were already in the vehicle lying on their backs perhaps a little bit uncomfortable it might but this was an opportunity to sleep in another hour so uh they shouldn't be in fact they

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so uh they shouldn't be in fact they won't even have known it happened they were just awakened an hour later well they they might they probably found out about it but they could just uh while away another hour vance brand thanks we'll be talking to you throughout this morning just to briefly recap we're in a hold of uh t-minus two hours and five minutes and holding launch scheduled for 11 a.m this morning now for the rest of the news in new york here's robin about 18 minutes after seven right now joining me now three former astronauts gene cernan flew gemini and two apollos the last man on the moon jim mcdivitt now vice president north american rockwell was a gemini and apollo and one of the original seven astronauts deke slayton who's just retired from the service he flew apollo soyuz back in the early 70s gentlemen just now we were talking with uh with general abramson about the decision to land at white sands jim what what do you think about the decision what's that going to mean to gordon and jack when they're flying into white sands does it make any difference i don't think so they're going to get to go when they want to which is today i think that's the most important thing right one piece of sand looks like another piece as long as the runway is long enough what about gene what about it it's going to cause any changes in their thinking or performance in any way i i really don't think so david at all and it you know the shuttle was designed for versatility and and uh this is what we're proven it does have the capability the tires don't know as jim said what piece of sand they're landing on i think they'll have no problems at all what do you think you just you've been with the program for a long time and just left it what do you think about the solution go to white sand oh there's no problem from a crew point of view they spend at least half of their time turning there in any case for any landing site but like gina and jim say one place that's about the same as the other you just want to get a little more used to the approaches than uh on your prime site do you think it's a good idea to go into white sand yeah i think it's a good idea to go there rather than hold i wouldn't hold i guess some of us are a little more guttier than others and i'd not have any aversion at all to coming

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not have any aversion at all to coming back into here and landing on the concrete well you know i uh joe angle is going to be with us in a little while we i talked with him about it yesterday deke why not land it right here that the plan is for what the fifth shuttle to land here anyway why not do it now and say the heck with white sands and all of that i would be prone to do that but i've got more confidence i guess in the guidance system and the crew than some other people have it's a conservative thing to go in there the prime thing of course is you got 35 000 feet of runway there compared to 15 here so you know if you overshoot or undershoot a little bit it's conservative what about this delay this morning gentlemen uh jim we were talking earlier when they delayed for an hour and i heard shuttle control say we have notified you know lousman fullerton well how why did they notify him if they were asleep can you jim can you explain this to me i really don't think they did i hope now it's sort of like when you're in the hospital they wake you up to give you the sleeping pill or something [Music] i think they really let them sleep an extra hour so they should be really be rested did you ever have a hole like that well as a matter of fact one time when we're going to do a wet countdown demonstration where we had to go through the whole procedure they delayed and i woke up and looked at my watch and i thought oh my gosh they've forgotten to get me up total panic gene what about you do you ever have a a hole did it you you betcha david uh i think even deacon gilmer remember back in german 89 we had a hold uh one time because of computer failure and we got out went two days later and then had a hole because our target vehicle went into the into the ocean for a rookie astronaut at that stage of the game when the one that targets your chase and drops into the ocean by mistake it you make it makes you think a little bit but we went two two days later two weeks later and then then on my last flight uh we held on a pad for about three hours and to be honest with you i really didn't think we'd we'd go but we finally did about 12 30 in the morning dick you you of of all people uh with all the delays by the time you finally got into space after all the years of preparation uh you finally got there with apollo

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uh you finally got there with apollo sawyers how disappointed that that you're not going to go up again well i went down to that pad a whole lot of times with a lot of crews and i always had to drop off right here the uh firing room which is always a great frustration so when i once got to go all the way that was just super i think dean had the longest hold of all 17 years worth that's right all right well so the count is on everything is well it would seem this morning right it's going super yeah i think that one small problem is really no reason to be concerned and i would expect to press right on to lift off at about 11 unless something new pops up all right well we're here dick slayton jim mcdivitt gene cernan uh good to have you all with us it's 22 minutes after we're about as deek just said about three hours and 35 minutes away from a launch the third launch of the space shuttle columbia jack lousma the commander and gordon fullerton are having their breakfast now we understand some cereal this morning and then he'll be suiting up and we'll see him go to the pad a little bit later we'll be back with more we go i'm anxious to go again but i'll actually see what it looks like from the ground i uh first when i was in the weather airplane that john young is flying this morning and the second one of course we had a little better seats on that last flight than we do this time what when that delay happened this morning did they wake them up or did they tell them or just let them sleep or were they sleeping you've seen them this morning they were they woke up anyway they were ready to get up and they just had a little more leisurely time get ready for breakfast and their physicals and stuff and that's what they're doing now joe you have flown i understand 135 different airplanes i mean you were we keep talking air force people that you're one of the most respected pilots in the world uh aside from your work as an astronaut 135 airplanes and 16 flights in the x-15 i mean you've done it all it would seem that you there couldn't be any surprises when you went up in the columbia were there any surprises for you oh yeah boy there sure were god well it is just so much different it's so much different than i had ever imagined john and kripp talked about the the vibrations during the first stage while the solid rockets are burning for the first two those are those two cigar kind of

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those are those two cigar kind of looking yes sir things on the side and it it is uh um not a rough enough to where you can't see instruments or anything but it is uh really uh gets your attention that it's kind of a rough bouncy ride and it really is good steady push how busy are you from the time you crawl in through there and get into your seats and get you know you're suited up you get into the seats how busy are you well there are spurts of times that you're busy and then there are times when you have time to kind of lay back and you would have time to to think about what's going on but you i think you end up just going over the checklist again making sure you haven't missed anything you just don't want to mess up will this delay this hour delay bother them at all or no affect them at all no it won't affect their timeline in the cockpit they're just delaying one hour that they put them in the cabin was the best part of your flight the two days it must have been disappointing not to stay up to five originally but what was the best part well i'll tell you it's hard to pick out a best part we worked awful hard on on everything course courses launching the entry maneuvers and all but i think the most inspirational thing that we saw the most awesome thing that i wasn't really ready for was uh when dick and i first got a chance to float over to the window and look back at the earth and i tell you david i can't it's just i wasn't ready for that site it was really great just a really awesome site what happens to you now though joe i mean you've got to live a life of a normal human being now what do you what goes through your mind when you look up in the sky now are you how do you deal with it trying to figure out how i can get back there just soon as i can again get back in line and go again when do you get to go well i don't know yet i haven't been assigned a crew yet but i'm hoping to fly within a year and a half or two years pick up another crew and then go fly again go again do me a favor i've read that you if you'd pull that that the the shuttle model off of the uh thing by the way the paint if all of you have noticed that the uh the external fuel tank for liftoff that burns up very shortly after liftoff the reason that is orange this time for the first time i understand is they they didn't want to spend the money on the paint is that right well this this color is is really uh simulates or

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simulates or represents the natural color of the thermal protection system it's a sprayed on foam type insulation around the tank and that's the natural color of it we saved about 600 pounds of weight by not painting it white on top of that so which is just 600 pounds of paper when you were coming in when you asked when you were coming back to land i understand that you actually flew this like an airplane when you were going 24 times the speed of sound yes right right could you feel it could you really fly it at that speed oh yes you sure can yes the flight control system uses uh reaction control jets that are located on the nose and back here on the tail for attitude control above the atmosphere or the or the control surfaces are not affected then as you as you settle into the atmosphere as you descend into the atmosphere and the aerodynamic pressure gets higher it blends the flight control surfaces in with the reaction control kit so as you fly the computer determines what combination of those two you should have to to control the attitude of the maneuver but you can really fly it in sure camp just like an airplane joe and it's a super flying machine it's good to have you with us this morning thank you our best to jack and gordon when you see them thanks david thank you good to see you brought us our angle truly patched here we'll be back just a couple of minutes with more the launch is on for 11 o'clock eastern time on its third journey as you said everything's going very well despite the problem earlier that forced the one-hour delay the snag that developed was during the fueling process and there was a heater element that didn't work properly once they did get it working properly they were able to go ahead with the fueling the problems been solved the astronauts have had breakfast they're suiting up officials now looking for the launch at 11 o'clock eastern time this morning astronauts lousman fullerton as we said getting into their space suits david thank you steve and joining dick slate and mean right now duke of course has just retired from nasa a former astronaut and spent many years in fact was in charge of orbital testing for the shuttle for some time deke joining me to talk with dick smith who's director of the kennedy space center this morning good morning nice to see you how's everything

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nice to see you how's everything everything all right now well after we got the heater for the uh gn2 for the engine fixed everything is going smooth and uh god willing 11 o'clock we'll go right and the weather what what does this just happen look what just happened here deke is that it looks kind of like it's no go right this minute hopefully it's going to burn off again it's been doing that off and on all morning so with a little luck it'll be burned again by launch time what are the goals of this mission deck one of the most important things that you have to learn from this one well the thing we really have to learn is really the temperature profile to the orbiter itself and how it performs under the hot conditions and with that we can then really start moving into the next development flight and then the next one of course the first operational flight that's that would be the fifth flight right fifth flight and that's the one that's going to land back here right planned to be land here that's correct and is that is that on schedule now do you see in deep do you see any problems now on the on the the shuttle landing back here not at all i wouldn't have any problem with the landing here this flight personally well from an operational standpoint we'd like to get it back here because the quicker we can get it back the quicker we can start reprocessing for the next flight what's the goal dick uh this is 1982 let's say in the next five years or six years how many flights a year do you see happening oh 24 plus 24 per year yes coming out of here how long before you think this is going to be routine eyes to the extent where we won't be quite so conservative in in getting them off i think by seven or eight launches we'll be learning how the bird will operate we'll drop some of the conservatism and start really using it the capability that's built into it and deke i get the feeling you're ready to drop some of it right now aren't you any time i think we're pretty close to being operational i see it thank you very much we'll see you in a while dick smith thanks for joining us this morning good luck with the launch a little later it's almost five minutes after the hour right now steve bell down in houston with all the news steve out to begin when the heaters for the

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out to begin when the heaters for the gaseous nitrogen system that is used to clean out the tank failed a crew was sent in to fix the heaters and they finally did but not before it cost nasa an hour's delay in the launch time but nasa officials were optimistic the delay would be only an hour everything going very smoothly in the countdown t-minus two hours five minutes and holding this is shuttle launch control the crew was allowed to sleep an hour later because of the snafu they got them up at 6 10 a.m eastern time and after a brief pre-flight physical they then had their traditional steak and eggs astronaut breakfast commander jack lousman co-pilot gordon fullerton were then suited up in their pressure suits and the suits were pressure checked again a routine step nasa is now racing the clock the launch window for this third shuttle flight closes at 1 22 pm eastern standard time jules bergman abc news at the kennedy space center if all goes well on this third voyage there will be seven days chock full of testing and experiments including thermal testing for the orbiter itself to see how colombia handles extreme heat shuttle commander jack lausma will first point the tail toward the sun for more than 24 hours then the nose will get the same treatment and finally the open payload bay door including grabbing and lifting two instrument packages for the first time a platform in the payload bay will carry the equipment for nine major experiments and some honeybees moths and plants are along for the ride with cameras to monitor their behavior in a weightless gravity-free environment but even if this flight goes as planned there will still be unanswered questions about one major objective how to make space shuttle flights routine one reason nasa officials have adjusted to weather problems to get this mission off on schedule is to show future commercial users that they can launch on the day they say

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they can launch on the day they say from the very beginning there's been a troublesome gap between expectation and reality yes this first launch last april was a master achievement for man in space but it was also three years late and almost two billion dollars over cost and even after the spectacular first landing that thrilled the world nasa officials again found themselves losing a race with the clock including the overtime clock the process of giving the orbiter its post-flight physical transporting it back to the cape and refurbishing it for the second flight ended up taking nearly seven months two months longer than expected and when a computer malfunction forced officials to scrub the first countdown they discovered that the oil filters in two of colombia's auxiliary power units were clogged nasa simply hadn't thought it would be necessary to give the shuttle an oil change after the maiden flight for this third mission the turnaround time has been cut to four months but when the space shuttle was first designed it was supposed to eventually be ready to return to orbit routinely 14 days after landing and officials now concede that goal just wasn't realistic a one-month turnaround time is more likely to be as routine as this system gets which means the projected number of commercial and military flights per year has had to be scaled back sharply and that puts even more pressure on the cost to pay off ratio at a time when critics are pushing for further cuts in nasa funding now with more this morning's news barry serafin in washington good morning barry good morning almost this route before he flew in skylab 3 gordon fullerton going up into space for his first trip and we'll continue to follow their coverage two two people who will have a great interest in this flight are the wives of those two men i had the pleasure recently of talking both with the gracialasma and marie fullerton i started by asking them about whether or not the trip was tougher on their husbands or on them well i don't know is it's hard on probably any of us

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probably any of us we work as a family unit so what distresses my husband probably distresses me and vice versa but this has been a really marvelous experience and a great opportunity to participate in in the upcoming events so it it really isn't a stressful situation of course there is a bit of concern but not an over amount marie what about you your husband has not uh been in orbit before this is his first thing with a trip what are you thinking about now what what's going through your mind well uh quite a bit but i'm really happy for him he has wanted this for a long time and he shared his his interest with all of our family we're all his supporters and we're pretty proud of him but but what are the things you think about or are there any i well i'm thinking of all the the work he's done to this and all the training he's had and he does come home and share it with all of us at home the the children and i and he likes to take the children out to ellington when he flies our little boy especially loves airplanes and he can identify any of the military airplanes that go over and we're just really happy about it and i'm just excited as a little ch child in a candy store about this gracia did you talk to your husband when he was up in uh in sky lab did you talk to him yes we did david we were able to talk to him once a week for about 10 minutes when they were over a tracking station and of course during that conversation it was pretty much like home you know the washing machine had broken down so where do we go to to find someone to repair it uh should we play football or not play football things like that and of course we wanted to know what he was seeing from his view from the spacecraft as he looked down on

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the spacecraft as he looked down on this good planet earth what do you say to marie i mean i would assume that you all must know each other awfully well by now after the year uh oh what did that look mean just wonderful things i i think we talk to each other three or four times a day on the phone what what do you all talk about between you well right now david we're talking about invitations to the launch uh special needs that our husbands and children have at this particular time and what needs are they gracia well probably to bring the children in on what's happening uh you know when when we're informed about what's happening we really have less concern i think and more participation and then as far as our husbands are concerned at least for my husband i think he's already gone flying he is really a warm body around the house marie what uh how helpful is is gracia and the other wives to you uh quite helpful i get to know better what to expect now going right past us as a matter of fact in the van on their way to launch pad 39a if you've just joined us today the space shuttle columbia going up for the third time there was a delay a delay of just one hour it was apparently a minor problem but something that needed to be fixed obviously but everything is set now the astronauts are on their way to the pad the launch now scheduled for 11 o'clock eastern time and they're going right past where they actually put the whole vehicle together they made up all of the different parts of it the vab the assembly building they call it and it's going by us right now i talked earlier with gene cernan and with jim mcdivitt and deke slayton three astra and joe engel who said they they wish they could have gone right past this point not stopped

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gone right past this point not stopped at the press area as you can see the truck is the van is stopped we will be back with more special coverage of the launch of space shuttle three when good morning america continues said there's been only one hitch a problem in the fueling process early this morning that forced the launch back an hour lift off now scheduled for 11 this morning eastern time and abc news will be covering it live of course the problem developed in a heater that keeps nitrogen in a gaseous state so it can cleanse the fuel line before liquid hydrogen and oxygen are pumped into the fuel tank the heater was fixed quickly but nasa decided to go ahead and delay the launch for that hour anyway and that did spoil their hopes of the first absolutely faultless launch for the space shuttle astronauts jack losman gordon fullerton are now arriving at the pad they'll ride an elevator up the gantry to the columbia and you see them there now as uh they are going aboard the uh launch facility and getting to the elevator and they will be going then up into the boarding area the technicians are now greeting the astronauts as they move into the boarding area just outside the orbiter lynn shure is down at the cape standing by for abc news lynn the sense of excitement's got to be building there well we thought we had lynn with us we are watching live pictures from the cape right now as astronauts jack lausman gordon fullerton a commander and pilot for shuttle mission 3 prepare to enter the orbiter they are just now coming up uh arriving with their equipment you see their little handheld air conditioners keep the space suits comfortable until they get into the orbiter itself lynn shure are you with us now in miami

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lynn shure are you with us now in miami or i'm sorry not in miami this is not a vacation steve we're here at the cave of course absolutely uh as you say the astronauts are in the white room right now right in front of the screen is gordon fullerton right in front of us 45 years old and the commander jack lausma behind him getting his helmet placed on him they are going to be in that white room for a few minutes and then of course they will proceed right into the orbiter itself to begin their final countdown they've got lots of things to do in there they've got buttons to pull and switches to pull they've got a lot of things to check out uh communication systems both here at kennedy and at houston they've got to work on things like cabin leaks to make sure they're not there we should tell you that when we talked to gordon fullerton a couple of weeks ago obviously long before the launch he said what they're going to be doing when they get into that cabin is lying flat on our backs and getting paid for it and he said that with a smile jack lousma said that it's really not all that comfortable because they're sort of squirming around trying to get a lot more comfortable obviously they're they're getting their last few minutes of uh standing up and keeping the circulation going they're chit chatting with the technicians we've sort of been expecting to see some little sign as they go off the technicians may be giving them a send off a pat on the back a joke a sign they might hold up to the camera we haven't seen it yet these two guys do have a pretty good sense of humor so i wouldn't be surprised if something like that comes out lynn one of the things that i found interesting is that they have slightly downgraded the number of things the astronauts are going to be asked to do during the very early part of the i've always been in flight firing room or the block house this is the first man one i'll ever have seen from outdoors i'm looking forward to it right now he's a new guy he's a new guy he's a new guy young new guy right a new guy young man what did you tell him you talked me through my first last time what do you tell us i'm not going to tell him anything he gets violent hey steve bell is down in houston steve jump in here

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jump in here yes david i can name one other person who's never been there in person i'm ready to volunteer it certainly looks exciting from that end and the capcom checks have gone through from here at the houston mission control center uh to the astronauts in the orbiter so that they're all linked up and houston's ready to take over just seconds after the orbiter leaves the launch pad but that weather does look a bit ominous at the moment yeah but it could change i understand it could change very quickly here let me ask you deke when you retired you came on with us and you chatted with me about and i asked you about what it was like the celebrity status of what happens i mean you became all of you instant uh national international heroes when you came back from space jim how would you describe slayton in terms of his personality and dealing with the the celebrity status well i i don't think it really affected deep very much he's one of the guys that uh i think he's the same today as he was when he started i didn't know him right in the beginning but i you know he's just one of these guys that can really handle it what about you could you did you handle it well was it of course i did you don't think i'm going to say no but you feel pretty relaxed with all that but you're still celebrities aren't you that's never going to change really is it jim well i think the key thing is what's an astronaut somebody who's flown into space and i remember when i was a jet pilot i first got to be a jet pilot that was a big deal and i think after a while uh astronauts uh there'll be more and more of them and people are gonna treat them more like normal human beings and i think that'd be a good idea too you do yeah i really do deke what do you think yeah i think it's going to get very routine and i think most of us are relatively non-celebrities at this point you have a celebrity status for about two months after flight and it works on somebody else let me ask you some of you guys are both real flyers you love airplanes you're going to keep flying deak i'm sure because you love to fly jim very briefly tell me about when you crash that f-104 out of out of edwards would you it's the only one i've ever had and i

00:32:00 (https://www.youtube.com/watch?v=AqUW3yum5ds&t=1920s)

it's the only one i've ever had and i had a flight control problem we and i ended up bashing the thing on the runway and i i finally ground to a halt out in the sand dunes and i thought well that's over with so i first thing i do is i shut the engine down this is with all my gear missing and they're all covered up with sand i got out and ran because i thought it might still blow up and then it didn't so i went back and i turned the rest of the switches on but she went back you didn't know now deke is that is that what a normal human being would do is go back to an airplane you've just crashed on the desert just to make sure the switches are shut down depends on your evaluation of the situation at the time you obviously thought it was a safe thing to do well i didn't write at the beginning because i was really running what do you think about jim when you look up into space when you look up at night at the stars or up here today what do you think about given where you've been and you've been out in space i think the thing that comes to my mind most is that when i started when dick started we were really exploring space it was sort of the foreign and rather hazardous environment i don't think the hazard's gone down much but i think we're beginning to use space and there are a lot of things in space which are going to be a lot of help to us and i think it's going to be a gradual transition to sort of a friendly place jim mcdevitt dick slate great having you both with us and we'll talk with you a little bit later we continue our special coverage of the third launch of the space shuttle columbia from the kennedy space center here in florida there it is everything's going a minute and four minutes away from launch we're in florida now frank reynolds good morning columbia the space shuttle is ready now to reach into space and soar around the earth for seven days just about every eye here at the kennedy space center is drawn to pad 39a where so many historic journeys into space have begun before and where right now astronauts jack losma and gordon fullerton are strapped into their seats in colombia in the cockpit there a crowd of several hundred thousand people we're told has gathered along the highways and

00:34:00 (https://www.youtube.com/watch?v=AqUW3yum5ds&t=2040s)

has gathered along the highways and river banks and ocean beaches here at cape canaveral the souvenir sellers are said to be hard at work and apparently uh doing a good business particularly in the t-shirt department you can see the many thousands who've been here some of them for several days and they're all of course waiting for those relatively few heart-stopping moments when the mighty engines of colombia and the two solid rocket boosters turn on the power and lift this huge and at this point somewhat ungainly appearing assemblage off the ground with me here at the cape is gene cernan a former astronaut who commanded apollo 17 our last mission to the moon gene what do you make of the weather it's been good and bad and good right now it's kind of blah well frank it's it's been up and down all morning but the prediction is for this clock for it to be another good day for a launch and be back here to uh to share the excitement with our viewers out there again oh it is yes and the excitement of course is building up here as we get within an hour the scheduled liftoff now will come in about 57 minutes the countdown clock shows 38 minutes but there are actually two 10-minute planned built-in holds uh during this last hour before launch as you doubtless know by now columbia was originally scheduled to be on the way at this moment with a 10 a.m launch but there has been a one-hour delay here we see the weather plane piloted by john young the commander of the first shuttle mission he's flying the grumman gulf stream to go off and he will check actually the landing conditions there at the kennedy landing strip in the event that uh something uh untoward happens during the first few minutes of the launch and the the mission then if it becomes necessary to return here to the kennedy landing strip they've got to know that the weather conditions are right before they give the go-ahead actually for the launch so we'll probably be here for hearing from john young will get that report before very long there was as i said this one hour delay here's some of the crowd gathered around the press site and the vip site uh

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press site and the vip site uh most of them of course when they see a camera they start looking at the camera but as i said before most people keep their eyes pinned out there at pad 39a the delay that occurred before dawn this morning was caused by a problem with a heater on some ground equipment that made it necessary to hold off the beginning of the fueling operation but that problem was fairly quickly resolved and the fuelling went ahead and uh the liftoff is now scheduled for 11 a.m eastern standard time because of the delay the astronauts were given an extra hour of sleep and then they then went through the usual pre-launch routine of the hearty breakfast of course and finally putting on their high altitude pressure suits gene to me appear to be a very hearty breakfast they don't have anything in front of them well i'm sure they'll have the the traditional steak and eggs i was talking to joe engel the commander of the second flight uh this morning joe said they uh they got up early anyway they were a little excited about uh getting ready to go here they're in the shooting room uh again it's of course it's very important that those suits fit properly they pressure check them they hope really never have to use them it's a contingency situation this is fullerton in the foreground here that's gordo on the foreground and jack lousman the commander of this flight is in the background this was uh just a few hours ago of course the crew is in the cockpit now and i've been monitoring some of their checkouts of the switches and the communications at this point in time and everything seems to be going fairly well too every everything uh you know of course we've been here before you know everyone thing went uh very well the last time until about uh the last few minutes a few seconds before the host but i've got a lot of faith we we learned last time we're going to learn some more things this time both about the spacecraft and the ground checkout equipment but uh i've i'm confident we're gonna make it you have to have a lot of faith and a lot of patience and also i can't resist just keeping the fingers crossed you know to make sure that everything goes right because we can't forget that last time particularly when we got down to 31 seconds and

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when we got down to 31 seconds and stopped uh you don't you don't think that's going to happen no i don't i think we're going to make it i'll hold you to that let's find out now a bit more about the two men who will soon ride colombia into space they are of course very well trained and they are not only physically but psychologically well equipped for this kind of an adventure it is a serious business but as lynn scherr reports lousma and fullerton are also blessed with a sense of humor it was clear from the moment he got the keys to colombia that jack lousma didn't take himself totally seriously you'll recall the previous crew was delayed on the launch pad because of a clogged oil filter lasma remembered i am kind of wondering know where the slip is for the 200 000 mile oil change you guys have that with you lousma had earlier entertained the world with his antics aboard skylab and he had some definite improvements in mind for living conditions on the shuttle specifically certain modern equipment in case something goes wrong with the experiment involving bees and mods that's good there's one other device that we're taking along and it's new that hasn't been used before and that we hope we don't have to use but we're prepared to use it if if we need to and perhaps you know about the new experiment that we're taking along and and it turned out that his pilot gordon fullerton wasn't going to let the commander get all the laughs what personal items would he take aboard i wanted to take a change of underwear for each day what's the most intriguing activity he'll perform i've been trying to figure out just exactly which wire to cut so that jack's hand controller won't work and i'll get to make the landing but i haven't done that yet what special precautions is he taking we have floated on some extra food for jack he's a big eater i intend to take my food out right away and hide it so he doesn't get to it no doubt we'll hear more from the comedy team of lousma and fullerton

[00:40:00 (https://www.youtube.com/watch?v=AqUW3yum5ds&t=2400s)](https://www.youtube.com/watch?v=AqUW3yum5ds&t=2400s)

team of lousma and fullerton when their act opens on orbit today and what an act it will be here you see a live picture now from the white room they are sealing the hatch the astronauts have gone on board they are in their positions they've been on board jean for some time actually haven't they yes they have but apparently it takes a little while to close out that uh the white room and the hatch and everything first that orbiter access arm won't really be retracted until we're very close to the actual time of launch the clock shows uh 32 minutes and 30 seconds or so before liftoff but keep in mind there are two 10-minute planned built-in holes and we are about 10 minutes or so away from that first 10-minute hold in this last hour before launch as we said the weather has already had an impact on this mission the planned landing site the dry lake bed at edwards air force base out of the california desert suddenly became not so dry and because edwards was to be not only the eventual destination at the end of the mission but also the landing site in the event of an emergency during the first hours of the flight the decision was made to switch to the gypsum strip at the white sands uh missile range in new mexico and the desert there is quite dry and still dry for a report on weather conditions and others matters at white sands we go right now to white sands and ken kashuahara frank the weather is indeed perfect here at white sands as you can see the sun is shining the winds are very calm so weather conditions are perfect in the event that the shuttle develops unexpected problems today and has to land after only one orbit what you don't see out here is is what could best be described as a logistical miracle as you know they had to truck and train all that equipment from edwards air force base in california down here to white sands in new mexico that equipment arrived late on saturday night behind schedule the ground technicians had to cancel a rehearsal yesterday but today they are all ready they are on

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today they are all ready they are on standby and should the shuttle land today they will be able to go into action and service the orbiter as they have in the past going back to the weather for for a second although it looks nice today the weather out here in new mexico tends to be a bit fickle and occasionally we'll get us gusty winds up to 30 and 40 miles an hour as we did last friday and when that happens this white gypsum sand can blow into a sandstorm and that is why nasa is going to evaluate the weather conditions here during the mission and could decide to bring the orbiter down and orbit early in the event weather conditions dictate that frank thank you karen gene have you landed at white sands well i have been up for quite some time it's been a number of years ago i have not landed uh with the shuttle crew on some of the practice runs there yet but i understand it's uh it's it's very handy for them to train and uh very easy to accommodate well it is now let's see we're about nine minutes or so away from uh the uh planned 10-minute hole you see the photographers getting ready the clock shows 29 minutes and 50 seconds or so before liftoff but that clock will be stopped for two 10-minute periods before the scheduled 11 a.m liftoff our coverage of the space shuttle columbia will continue in a moment reach into space live coverage of today's space shuttle launch brought to you by karistan carpets 7am eastern standard time liftoff of columbia the space shuttle to make its third journey into space and all goes well gene i was i can't stop looking at the weather it seems to be improving even as we sit here i think it's gotten a lot better since we've come on the air yeah well of course it has been uh changeable and uh it's very important for the weather here to be acceptable for them to be able to

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to be acceptable for them to be able to take off but we did see that uh weather plane going up not long ago and i imagine we should have a report very shortly from john young about whether the weather is acceptable well between now and 11 o'clock eastern time when it is expected that colombia will depart the premises we're going to be hearing quite a bit from launch control you see the spectators and reporters here over the years of the space program the launch operation has become more sophisticated and more streamlined and jules bergman some time ago prepared this videotaped report on the people in launch control who are in charge jules during the days of apollo about 400 people were needed here at the launch control center for blastoffs to the moon now ten years later fewer than a third of those people are required to launch the shuttle now there's a more complex system of computers monitored by a smaller group of specialized engineers even though the computer controls almost all of our functions we're still prepared at any time to leap in and take any kind of correction actions that may be necessary jim sullivan is the orbiter test conductor after crew and grass my responsibility is to perform the communications with the crew through through launch if a problem develops a hold may be called and the clock is stopped norm carlson is nasa's test director a whole hole comes to me and i i decided with the advice of the system experts whether to hold or not the buck finally stops here when the word to pick up the count comes from launch director george page we of course want to get it off on time we want to have a good mission but i'm also worried about hey whatever one of a thousand problems come up will we react to it in time and will we do what we have to do to save the vehicle and keep things the way they should be

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they should be telling us if things are the way they should be is hugh harris the voice of shuttle launch control the the real job is to to keep listening to what's happening to make sure that i'm not saying liftoff when it's really just sitting there on the pad well that of course is uh not likely to happen that he will say liftoff when it's still sitting on the pad there you see the firing room that's the exterior view of it and it of course is attached might say to the huge vehicle assembly building which is just about the largest building on the face of the earth and that is the building where the spacecraft are assembled mated put together and eventually uh put on that mobile uh transmission or a big tractor that uh finally takes it all the way out here's the voice of uh launch control coming up right now let's pick up this announcement this is shuttle launch control at t minus 25 minutes and counting the cabin leak check has been completed and the cabin vents open presently air-to-ground voice checks between the astronauts and mission control increase [Applause] is the closeout crew which has been securing the orbiter access arm to be moved back at seven minutes prior to launch taking a look at the uh at the orbiter to ensure that it is satisfactory in that area for launch all right that was hugh harris giving us the latest information the astronauts are carrying out their communications checks with houston mission control where of course they will take over control of the mission just as soon as they clear the pad of the tower here our coverage of space shuttle columbia will continue in just a moment

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will continue in just a moment it's been stopped at uh 20 minutes to go this is the first of two planned 10-minute holes doesn't mean anything is wrong i'd like to talk just a little bit more about this the idea of course when this is pointed if i may jump surely it's pointed right right at the sun here the idea is to make sure that the uh cooling units inside here are able to still keep this uh the systems at this end of the spacecraft functioning properly right that's correct as well as those units that are to keep this area warm yes whether they can keep it warm so it's you know you have to it's like we're in a wool coat it's good in the winter time it's not very good in the summertime in this case it has to be good in both cases it'll be uh it could be 200 degrees above fahrenheit above fahrenheit 200 degrees below on the opposite end of the spacecraft and also too they're going to as i understand it after it's uh turned around in this configuration for uh for a long time actually start the engines in the cold mode they will cool down the small ohms thrusters that they use to deorbit and maneuver in space and cool them down and start them like starting a car on a cold day will it start properly will they warm up and come up to their performance now a lot of people might wonder well if it's so hot and so cold out there how do they keep a neutral temperature many times as we did go into the moon they will take the spacecraft as it goes around the earth and rotate it we call it barbecue mode barbecue name for it and so you you honorably get the sun and get to deep space and remember when this parts of the spacecraft face the black space away from the earth or away from the sun they radiate heat tremendously fast well that's going to be a very important experiment and i'm sure that they'll learn a great deal about the reaction of the spacecraft to the exposure major objective of this particular flight really is based upon finding out how the spacecraft and all its systems will react under extreme temperature conditions and also of course the things they're inside the payload well we're in the first of two planned uh uh 10-minute holes now in this last hour before launch but that simply means that the clock the

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but that simply means that the clock the countdown clock is stopped it does not mean that everybody involved has stopped working especially the astronauts themselves hugh downes recently uh went to the simulator at the johnson space center in houston and filed this report on what the astronauts are probably doing right about now you i'm sure you know they're not just sitting there staring into a big chunk of a massive checklist to go through and they're doing that right now first thing they would want to do is to make sure the communications is firmly established between them and the firing room at the cape and mission control at the johnson space center they do that by activating a set of switches located up here once that communication is established and they're settled in their seats they face an awful lot of switches and gauges and these switches have been preset by by ground crew people they are then checked by the astronauts among the highlights of what must be done and once they've got in position and checked over their what they call cue cards that is the bits of of card cut from the checklist and arranged so they don't interfere with the line of sight to a gauge or a switch they check first off the abort command light this is the abort advisory and this light can be lit even if all of the communication failed to advise of the necessity to abort a cabin leak check is the next thing and that's done by closing the cabin vents and over pressurizing it deliberately they can see the cabin pressure on them on a gauge up here and then while the ground loads the primary computers with the launch software the crew will be loading the backup computers that's done with this keyboard and the readout is on these screens and again for today's launch the astronauts will be doing all of this wearing their modified high altitude

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wearing their modified high altitude pressure suits with visors closed tight but eyes wide open on their instruments we're watching the meters to see the main engines ignite come up to about 60 percent and then go to full thrust and when that happens and we can feel and sense that we will then be waiting for the solid rockets to light off and when they light off we're on our way and on their way they'll be and of course as soon as they do get on their way the control of the mission will be taken over by mission control at the johnson space center in houston and our colleague steve bell is there right now steve i imagine you're all set to watch this bird go we certainly are frank and they have already established communications with the orbiter here at mission control in houston the programmers here in houston are calling this third flight of columbia a pathfinder mission and that's because the experiments and testing that will take place will keep the astronauts busy for seven days are aimed primarily at providing important information for future flights for instance colombia's scientific payload is designed primarily to measure the environment that the shuttle produces around itself in space and on this mission gordon fullerton will give the remote manipulator system another workout including grabbing two of the instrument packages holding them outside the cargo bay to take some of those measurements for commander jack lausma a key assignment will be thermal stress tests for colombia exposing parts of the spacecraft to the sun for prolonged periods to test resistance to extremes of heat and cold incidentally there are bees and moths aboard this mission they're going to be monitored by cameras to see how they fly in a weightless gravity-free environment and finally nasa wants to bring colombia in for a cross-wind landing at white sands to further test the orbiter's in-flight performance capabilities so it's a matter here of waiting for that launch back at the cape and seconds after the launch it'll the takeover will be here in houston frank thank you steve uh about 90

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frank thank you steve uh about 90 minutes or so ago after everything was all sealed up and particularly after the fueling operations had been completed why a group of uh technical experts were actually moving around at the base of the uh shuttle and you can see them here i guess the proper term for them gene is they're sniffers they're looking for what precisely we're looking for ice buildups on the uh on the external tank you remember we lost all those tiles on that first flight and some consideration has been given to the fact that perhaps there were builds up of ice on the external tank it flew off and it literally broke pieces of tile off and so they're trying to make sure that that doesn't happen again this is a picture taken by one of the nasa cameras which is a very close as you can see that's right at the base of one of those solid rockets so you can get a feeling for the size that's a man and and he's standing next to this gigantic uh tremendous vehicle of uh of power there are two of them there they are so we'll be going uh for that liftoff uh in just about 32 minutes uh here is uh michael york the actor who is one of the celebrities i guess who uh accepted the invitation to come to the space center this morning and watch the uh lift off frank look at the people out there everyone is sort of getting as close as they can they're all getting right up to the front because here we are still 30 minutes away and yet the excitement is building you can see people just want to get closer and closer and closer we're going to have the end of this first count or hold in just about a minute or two from now so our coverage of the space shuttle columbia the pre-launch operations will continue after this message and a word from our local stations in years to come this magnificent ship will be the common carrier providing routine access to the vast ocean

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routine access to the vast ocean that is space on board as before tang instant breakfast drink with its delicious orange taste and a full day supply of vitamin c in every glass great tasting tang for space men [Applause] and parent families we're back here at the kennedy space center and uh if you look very closely peering through the haze there you can see the ss scandinavian sea which is a cruise ship that left uh port canaveral at eight o'clock this morning and here is a shot from on deck of the scandinavian sea it's a sort of a cruise to nowhere they went out for the liftoff and 12 hours of uh dining drinking dancing and space watching maybe even uh some gambling there probably are slot machines on the sea on the boat here is a former senator george mcgovern who has come down to see the launch of the shuttle today i think it's interesting to see frank how many young people like we saw amy carter typically 14 years old grew up in a time when uh when man she never knew one man didn't go to the moon that's right we see the the young people the experiments on the getaway package uh young people are excited you know that's tomorrow that's the future and it's just great to see people out there excited about something that belongs to them well i think in many classrooms around the country today gene that classes are being suspended while the youngsters have an opportunity to watch this thing go and i certainly hope that's the case anyway we are in the uh second hole now the countdown clock has stopped we are actually about uh 16 minutes or so away from the moment of launch the launch is scheduled for 11 a.m eastern time see what a sight it is well we can now see that i guess we call it rust or orange colored tank as you say it's the natural color of the insulation primarily to save weight they did not paint it i believe from now on they will mix it with a white pigment so it'll it'll be white again this may be the only launch we see it this way well they not only did not paint it uh but they saved

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did not paint it uh but they saved weight and they saved a few dollars too and this is a time to do that yes that should make david stockman his crew happy well the space shuttle columbia is going off on its third mission but it has been spruced up and uh polished you might say and made ready for this uh third mission it started right away here's jules bergman with the report on what they did to get it ready preparations for colombia's third flight began as soon as it landed last november after the initial safing and inspection the shuttle's payload and fuel tanks were removed ten days later the head back to the kennedy space center piggyback on at 7 47. first stop there the orbiter processing facility the heat tiles were checked for damage and about 450 were replaced there are thirty two thousand tiles and all were re-waterproofed the remote arm was serviced and a new end effector used for grasping the payloads was installed the fuel cell that failed during the second mission cutting short that flight was replaced and the other two fuel cells carefully checked also replaced was the auxiliary power unit or apu that overheated during the second shuttle's first launch attempt causing the scrub at t minus 31 seconds nine scientific experiments were loaded into the cargo bay other experiments were placed in the crew compartments then the columbia was moved to the huge vehicle assembly building here the solid fuel rocket boosters and the external tank holding the main engine's liquid fuel were mated on the mobile launcher the ground with its landing gear retracted to be joined with the rest of the shuttle the shuttle rollout to the pad on the massive crawler took about seven hours between the second and third flights four months elapsed half as long as it took between flights one and two and moving toward nasa's goal of a

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and moving toward nasa's goal of a one-month turnaround time between missions well they're getting there they're moving a little closer and cutting down that turnaround time gene well you know realistically uh perhaps unrealistically at a time in the future we're planning to launch 24 of these vehicles in one year yes that's uh that's very optimistic i'm not sure we'll ever retain that but i think you have to have some goals some rules from which to work from well of course the thing has to go up and down frequently too otherwise it doesn't really fulfill its mission because it's supposed to be a sort of a very very glamorous pickup truck to take things up there and retrieve them and bring them back down and if it does it only a few times a year then the shuttle will not really have achieved its objective well in car it's cost effectiveness is in fact dependent upon how much it flies and of course somewhere down the line there ought to be a large laboratory for it to have a destination to go to and this is what's coming all right well we are a few minutes away from picking up the countdown the clock has been stopped at the nine minute mark and it will pick up again with nine minutes to go in just a few minutes our coverage of space shuttle columbia will continue in a moment you

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